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EXAMINER

JULES, FRANTZ F

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| ART UNIT | PAPER NUMBER |
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3617

DATE MAILED: 02/25/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/705,056

Applicant(s)

FORBES, JAMES W.

Examiner

Frantz F. Jules

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 22 January 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 11-20 and 22-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 23-28 is/are allowed.
- 6) ☒ Claim(s) 1-8, 11-20, 22, 29 and 30 is/are rejected.
- 7) ☒ Claim(s) 20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claim 20 is objected to because of the following informalities:

In claim 20, line 9, a comma should be inserted between the words truck and said.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-8, 11-19, 22, 30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 12, the phrase "said top truss assembly being mounted at a height exceeding AAR Plate C" is confusing as the scope of the claim is undefined by the use of AAR specification which is subject to change over time and the height of the top truss assembly is also undefined. Similar problem exists in claim 30, line 9.

In claim 12, line 1, the phrase "said end section lading interface lies at a height greater than 42 inches above top of rail" is confusing as it is unclear which particular rail structure applicant is referring to.

In claim 17, lines 14-17, the phrase "said railroad car having a load limit height defined at a level measured upwardly from said medial structure, and having a nominal load limit height that is at least as great as the largest integer multiple of 33 inches that is

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less than the load limit height" is confusing as it is unclear what specific value of load limit height applicant is referring to at the end of the phrase.

In claim 22, line 21, the phrase "top of rail" is confusing as it is unclear which particular structure, applicant is referring to. Similar confusing term exists in claim 22, line 22.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-8, 11-13, 17-20, 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dominguez et al'575.

Claims 1-8, 11-13, 17-20, 30

Dominguez et al teach all the limitations of claims 1-8, 11-13, 17-20, 30 except for a center beam railroad car having a top truss assembly mounted at a height exceeding AAR Plate C. The general concept of mounting a top truss assembly in a center beam railroad car at a height greater than AAR Plate C falls within the range of common knowledge as part of obvious routine design expediency during design optimization process. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Dominguez et al to include the use of a top truss assembly which is mounted at a height exceeding AAR Plate C in order to increase the load carrying capability of the center beam railroad car.

Claims 5-8

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Regarding using a medial decking portion having a length between 28 feet and 40 feet including an upwardly stepped load bearing interface that is at least 30 inches tall as recited in claims 5-8, It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Dominguez et al to include the use of a medial decking portion having a length between 28 feet and 40 feet including an upwardly stepped load bearing interface that is at least 30 inches tall in his advantageous system, as floor design is a common and everyday occurrence throughout the center beam railroad car design art and the specific use of a medial decking portion having a length between 28 feet and 40 feet including an upwardly stepped load bearing interface that is at least 30 inches tall would have been an obvious matter of design preference depending upon such factors as the weight of the object to be carried by the railroad car, the yield strength of the floor material; the ordinarily skilled artisan choosing the best stress profile corresponding to a particular loading imposed on the side walls which would most optimize the cost and performance of the device for a particular application at hand, based upon the above noted common design criteria.

Claims 17-20

Regarding using a railroad car with a load limit height measured from the floor with a nominal height that is at least as great as the largest integer multiple of 33 inches that is less than the load limit height or 5 inches below the nominal load limit height as recited in claims 17-20 It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Dominguez et al to include the use of a railroad car with a load limit height measured from the floor with a nominal height that is at least as great

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as the largest integer multiple of 33 inches that is less than the load limit height or 5 inches below the nominal load limit height in his advantageous system, as web assembly design is a common and everyday occurrence throughout the center beam railroad car design art and the specific use of a railroad car with a load limit height measured from the floor with a nominal height that is at least as great as the largest integer multiple of 33 inches that is less than the load limit height or 5 inches below the nominal load limit height would have been an obvious matter of design preference depending upon such factors as the weight and height of the object to be carried by the center beam railroad car, the yield strength of the materials used to built the railroad car; the ordinarily skilled artisan choosing the best stress profile corresponding to a particular loading imposed on the side walls which would most optimize the cost and performance of the device for a particular application at hand, based upon the above noted common design criteria.

6. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dominguez et al in view of Blodgett design handbook.

Claim 22

Dominguez et al teach all the limitations of claim 22 except for a center beam railroad car having medium deck portion joined to end deck portion by knee braces including longitudinally extending vertical inboard flange and slanted outboard flanges. The general concept of using knee braces including longitudinally extending vertical inboard flange and slanted outboard flanges to join members of a structure is well known in the art as illustrated by Blodgett design handbook, see Fig 9a. It would have been obvious

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to one of ordinary skill in the art at the time of the invention to modify Dominguez et al to include the use of knee braces including longitudinally extending vertical inboard flange and slanted outboard flanges to join medium deck portion to end deck portions in his advantageous center beam railroad car as taught by Blodgett design handbook in order reduce failure at the joint and prevent deflection of the side sills member under heavy loadings.

7. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dominguez et al in view of Jamrozy et al.

Claim 29

Dominguez et al teach all the limitations of claim 29 except for a center beam railroad car having end deck side sills with greater depth of section than medial decking side sills. The general concept of using end deck side sills with greater depth of section than medial decking side sill is well known in the art as illustrated by Jamrozy et al, see fig. 4. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Dominguez et al to include the use of end deck side sills with greater depth of section than medial decking side sill in his advantageous center beam railroad car as taught Jamrozy et al in order to reduce stress in the end deck side sills under heavy loadings.

Allowable Subject Matter

8. Claims 14-16 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

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9. Claims 23-28 stand allowable.

Response to Arguments

10. Applicant's arguments filed 1/22/02 have been fully considered but they are moot in view of the new grounds of rejection and the allowance of claims 23-28.

The rejection of the claims under 112 is proper as the limitation of AAR Plate C renders the independent claims indefinite in scope.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Bateson et al are cited to show related related center beam railroad car having downward stepped medial deck structure.

Manning, Lutkenhouse, Simpson, Abrams are cited to show closely related vehicle deck structure having stepped medial section.

Thompson, Klar are cited to show vehicle deck structure having storage compartment.

Baker and Pringle are cited to show related vehicle deck structure having a skirt member along the web work assembly.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frantz F. Jules whose telephone number is (703) 308-8780. The examiner can normally be reached on Monday-Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph S. Morano can be reached on (703) 308-0230. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7687 for regular communications and (703) 305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

Frantz F. Jules
Examiner
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FFJ

February 21, 2002

A handwritten signature in black ink, appearing to read 'S. Morano', with a stylized flourish at the end.

S. JOSEPH MORANO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600